**MEMO G11 Nov 2012**

**IT**

**Question 1**

1.1a) Instruction Set – instruction / commands**✓** that the CPU can understand**✓**

b) RFID a chip**✓** that can be used to identify object using radio frequencies**✓**

c) Web sites that are interactive and are characterised by blogs wiki and forums**✓**. The user provide the content**✓**

d) A total used to sum **✓**a section of data to detect errors**✓**

e) Using the services if the Internet**✓** such as file storage and applications**✓**

f) Podcast a voice or video file**✓** that can be downloaded mainly onto portable devices**✓**

g) Physical layout**✓** of the network**✓**

h) Converting a document in plain text **✓**using an algorithm **✓**to cypher test so it cannot be read

i) Memory that has 2 channels**✓** between RAM and CPU **✓**for fast access.

j) A signal**✓** to the CPU**✓** from an application such divide by 0.

2 X 10 = 20

**Question 2**

**2**.1 a) CPU**✓**, RAM**✓** graphics card (any 2)

b) Hard drive**✓**, network card**✓**, CD drive etc

c) No it depends on the design**✓**. Tablets may have many CPUs to handle different functions like graphics**✓**

2.2

i)

1. Intel**✓** and AMD nvIDIA**✓**
2. 4 processors **✓**on one chip**✓**
3. Speed**✓**
4. 2.8Ghz**✓**

ii)

1. hard drive**✓** – magnetic, RAM – electric**✓**, DVD optical**✓**, SSD – magnetic**✓**
2. hard dirve – tracks sectors **✓**moving arm write data**✓** , DVD – data written in a spiral**✓** using pits/bumps**✓**
3. Size,**✓** and use wireless

iii)

1. Tower is in the screen**✓**

iv)

1. No**✓**
2. To link to network**✓** and use resources of network charge
3. Mouse **✓**joystick**✓**

v)

a) Reduction of size costs more**✓**, storage used is more expensive than a hard drive**✓**

vi)

1. UTP/Ethernet **✓**and Wireless/Wifi or Bluetooth**✓**
2. Cable plugs into a network card **✓**on mother board attaches to a switch.**✓** Wireless connects using radio waves**✓** to a WAP**✓** which connects to the rest of the network

vii)

1. Microsoft**✓**, Apple**✓**
2. Tablet require different OS software **✓**as its functionality differs slightly due to the high graphics**✓**
3. Samsung, talks easily to Windows**✓** and the blackberry**✓**. Do not want to be controlled by Apple ITunes. **✓**Or an argument th other way with 2 reasons

2.3

1. fetch,**✓** decode,**✓** execute**✓** store**✓**
2. Address**✓**
3. IR**✓**
4. control**✓**
5. acc**✓**

**Question 3**

3.1

1. Control file storage**✓**, input and output run programs**✓**
2. each process gets enough CPU time**✓**, gets enough resources**✓** and CPU used efficiently **✓**
3. running**✓**, suspended**✓** or ready**✓**. A process is suspended**✓** when it is waiting for input.

3.2

1. Hybrid**✓**
2. CSMA CD**✓**
3. Ethernet**✓**
4. UTP**✓**
5. Switch**✓**
6. User Names and password – restrict access **✓**and apply rights**✓**

Firewall – block sites **✓**and manage Interne traffic**✓**

RAID – ensure against hard drive failure**✓✓**

UPS – ensure against power failure **✓**and surges**✓**

**Question 4**

4.1 Laptop is portable**✓**, has a good speed (close to a desktop)**✓** Cost is expensive but can use for 3 year**✓**, I can use Internet security software to protect,**✓** able to do all my work**✓**

4.2

1. Copying another’s intellectual property without referencing**✓**
2. Easy to do**✓**, info readily available**✓**
3. Online encyclopedia**✓**
4. Yes **✓**still need to reference**✓**
5. Check out the author,**✓** check for all other work they have done. Check if other authors say the same**✓**

4.3

1. Electroinc**✓**
2. Phishing is an email **✓**sent to lure user to spoofed web site**✓** to get details. Pharming when browser is altered **✓**to take user to spoofed web site**✓**
3. Secure Socket layer**✓** Padlock **✓**and https**✓**
4. A file is encrypted using a public key**✓** but can only be read using a private key. Digital Certificate ensures that web site is authentic**✓**

4.4

a) car manufacture**✓✓** space travel – explain each**✓✓**

b) true,**✓** do repetitive tasks**✓** accurately**✓**